Introduction

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This special issue aims to provide academics, policymakers and practitioners with valuable research results and analysis pertaining to the major issues and challenges that interrelate quantitative energy finance applied to environmental, climatic and energetic transition and renewable energy.

The articles in this special issue study the state of art, current issues and new trends in quantitative finance applied in energy markets which deal with problematic of environment, climate, CO_2 emissions, energetic transition, fuel price or renewable energy.

The topics present in this special issue cover issues such as

- Brings insights about the mathematical modelling of these problematic.
- Provides quantitative formulas and results to price and hedge derivatives and options in such markets.
- Studies the financial mathematical particularities of the energy markets such as volatility breaks, jumps, economy states, asymmetries in price.
- Offers an innovative theoretical approach to problems of interest in energy risk management and modelling.
- Thermal energy storage and optimal management of oil exploitation.
- Blends mathematical techniques with new developments and theoretical results in energy finance applied environmental and climate problems.
- Relationship between commodities prices and financial variables.